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| APPLICATION NO. | FILING DATE        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|--------------------|----------------------|---------------------|------------------|
| 09/746,107      | 12/21/2000         | Andrew K. Krumel     | 802-004             | 2214             |
| 7:              | 590 09/26/2005     | EXAMINER             |                     |                  |
|                 | LK & ASSOCIATES    | LUU, LE HIEN         |                     |                  |
| P.O. BOX 3607   | 7<br>CA 94024-0607 | -                    | ART UNIT            | PAPER NUMBER     |
| LOS ALTOS,      | C/1 94024-0007     |                      | 2141                |                  |
|                 |                    |                      |                     |                  |

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| <u>Y</u>  | •  |   |  |  |  |  |  |
|---|--|---|--|--|--|--|--|
|   | Application No   | •   | Applicant(s)   |  |  |  |  |
| Office Action Comments  | 09/746,107   |   | KRUMEL, ANDREW K.  |  |  |  |  |
| Office Action Summary   | Examiner   |   | Art Unit   |  |  |  |  |
|   | Le H. Luu  |   | 2141   |  |  |  |  |
| The MAILING DATE of this communical Period for Reply  | tion appears on the cove   | er sheet with the co  | rrespondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communical if the period for reply specified above is less than thirty (30) of the No period for reply is specified above, the maximum statute Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b). | ATION.  TOFR 1.136(a). In no event, how cation.  ays, a reply within the statutory many period will apply and will expire, by statute, cause the application | vever, may a reply be time<br>inimum of thirty (30) days v<br>SIX (6) MONTHS from th<br>to become ABANDONED | ly filed will be considered timely. e mailing date of this communication. (35 U.S.C. § 133). |  |  |  |  |
| Status  |  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed of  | on <u>07/15/05 - 09/14/05</u> .  |   |  |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)  | 2a)☑ This action is <b>FINAL</b> . 2b)☐ This action is non-final.  |   |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |  |  |
| Disposition of Claims   |  |   | •  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-54</u> is/are pending in the app  | 4)⊠ Claim(s) <u>1-54</u> is/are pending in the application.  |   |  |  |  |  |  |
| 4a) Of the above claim(s) 32,33,35-39 and 42-48 is/are withdrawn from consideration.  |  |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   | <u> </u>   |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-31,34,40,41 and 49-54</u> is/ar   | e rejected.  |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |  | . ·   |  |  |  |  |  |
| 8) Claim(s) are subject to restrictio   | n and/or election require  | ement.  |  |  |  |  |  |
| Application Papers  |  |   |  |  |  |  |  |
| 9) The specification is objected to by the E  | xaminer.   |   |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>14 September 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |  |   |  |  |  |  |  |
| Applicant may not request that any objectio   | n to the drawing(s) be held  | l in abeyance. See 3  | 37 CFR 1.85(a).  |  |  |  |  |
| Replacement drawing sheet(s) including the  | e correction is required if the  | ne drawing(s) is objec  | cted to. See 37 CFR 1.121(d).  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for a) All b) Some * c) None of:  | foreign priority under 35  | 5 U.S.C. § 119(a)-(   | d) or (f).   |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |   |  |  |  |  |  |
|   |  |   |  |  |  |  |  |
| Attachment(s)   |  |   | ·  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) [   | Interview Summary (P  | TO-413)  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-   |  | Paper No(s)/Mail Date   | · ·  |  |  |  |  |
| <ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO<br/>Paper No(s)/Mail Date 07/20/05.</li> </ol>  | D/SB/08) 5) ∐<br>6) ☐  | Notice of Informal Pate Other:  | ent Application (PTO-152)  |  |  |  |  |
| U.S. Patent and Trademark Office  |  |   |  |  |  |  |  |
| PTOL-326 (Rev. 1-04)  | Office Action Summary  | Part o  | of Paper No./Mail Date 20050920  |  |  |  |  |

- 1. Claims 1-31, 34, 40-41, and 49-54 are presented for examination.
- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-31, 34, 40-41, and 49-54 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hagiuda et al. (Hagiuda) patent no. 6,182,225.

4. As to claim 1, Hagiuda teaches the invention as claimed, including a method for transmitting information to or from a programmable logic device-based system ("PLD system") over a packet-based network using a protocol, comprising the steps of:

sending at least a first packet from a computing system to the PLD system over the network (col. 16 line 23 - col. 18 line 61);

in the PLD system, extracting first information from the first packet (col. 12 lines 9-55);

in response to the first information, sending at least a second packet from the PLD system to the computing system over the network, wherein the second packet contains information identifying the PLD system and also information indicative of one or more commands in accordance with the protocol, wherein the PLD system operates in accordance with the one or more commands (col. 65 line 65 - col. 66 line 57);

in response to the second packet, exchanging one or more third packets between the computing system and the PLD system over the network, wherein the one or more third packets comprise one or more commands in accordance with the protocol, wherein second information extracted from the one or more third packets is exchanged between the computing system and the PLD system (col. 65 line 65 - col. 66 line 57; col. 81 line 12 - col. 82 line 22).

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- 5. As to claim 2, Hagiuda teaches the second information comprises information selected from the group consisting of: configuration information; bar code data; information indicative of a weight of one or more objects or material; information indicative of temperature; information indicative of movement or position; information indicative of a size of one or more objects or material; information indicative of a presence or amount of light; information indicative of pressure; information indicative of friction; information indicative of elevation; information indicative of thickness; information indicative of reflectivity; information indicative of wind; information indicative of a degree of moisture content; camera or other image data; information indicative of color or other optical characteristics of an object or material; information indicative of success or failure of an operation; information derived from a magnetic card reader; information indicative of pitch or other sound characteristics; information indicative of a smell characteristics; information indicative of a texture characteristic; and information indicative of a status condition of an industrial process (col. 16 line 41 col. 18 line 61).
- 6. As to claim 3, Hagiuda teaches the PLD system includes non-volatile memory for storage of data, wherein the non-volatile memory comprises Flash memory, electrically erasable and programmable read only memory or battery-backed-up random access memory (col. 14 lines 1-18).

- 7. As to claims 4-7, Hagiuda teaches a plurality of third packets are received by the PLD system, wherein, after receiving each of the third packets, the PLD system sends at least a fourth packet to the computing system over the network, wherein the fourth packets each acknowledge receipt of a corresponding one of the third packets; after receiving each of the third packets, the PLD system saves second data from the third packets in non-volatile memory of the system; wherein the PLD system saves the second data in the non-volatile memory of the system from each of the third packets prior to sending each of the fourth packets; and wherein, after receipt by the computing system of a fourth packet that acknowledges receipt by the PLD system of a final third packet, the computing system sends at least a fifth packet to the PLD system, wherein, in response to the fifth packet, the PLD system saves one or more data indicating that all of the second data has been received and stored in the non-volatile memory (col. 14 lines 1-18; col. 81 line 12 col. 28 line 36).
- 8. As to claims 8-11, Hagiuda teaches the second data is loaded into the PLD system in response to a user command from a user; wherein the user command comprises a command input by a switch; wherein the switch comprises a physical switch on the PLD system; wherein the user command comprises a command entered via the computing system (col. 14 lines 1-53).
- 9. As to claim 12-16, Hagiuda teaches one or more display devices provide visual feedback of the status of the PLD system; wherein the one or more display devices

comprise one or more LEDs; wherein the one or more display devices comprise a liquid crystal display; wherein the PLD system provides audio feedback indicative of the status of the PLD system; wherein at least one LED indicates that the step of loading the second data into the PLD system is in process (col. 13 lines 14-24; col. 14 lines 32-53; col. 40 lines 1-14).

- 10. As to claims 17-20, Hagiuda teaches the PLD system processes packets sent from the computing system; the PLD system extracts commands in accordance with the protocol from the packets sent from the computing system; the second packet includes a version identifier for the PLD system; the second packet contains information that identifies a plurality of commands in accordance with the protocol to which the PLD system responds (col. 16 lines 41 col. 18 line 61; col. 26 lines 25-30; col. 66 line 62 col. 67 line 5; figure 26).
- 11. As to claims 21-29 and 50-54, Hagiuda teaches the second packet contains information that is indicative of a location coupled to the network, wherein the location contains information that identifies a plurality of commands in accordance with the protocol to which the PLD system responds; the location comprises storage coupled to the computing system; the location comprises storage on a second network, wherein the computing system accesses the storage via the second network; the information that is indicative of the location comprises an address of a node on the second network;

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the second network comprises an Internet network; the information that is indicative of the location comprises a URL; the plurality of commands include one or more first commands to which the PLD system responds and also include one or more second commands to which the PLD system responds; the first commands comprise core commands to which at least a second system containing a second PLD system also responds; the second commands comprise custom commands to which the second PLD system does not respond (figures 7-8 and 43; col. 12 line 57 - col. 13 line 13; col. 16 lines 41 - col. 18 line 61).

- 12. As to claims 30-31 and 34, Hagiuda teaches the network comprises a local area network; the network comprises an Ethernet-based network; at least certain of the first, second or third packets comprise Ethernet packets (Figures 1 and 24).
- 13. As to claims 40-41 and 49, Hagiuda teaches at least certain of the packets sent by the computing system comprises broadcast packets having a predetermined address that are directed to a first predetermined port; at least certain of the packets sent by the PLD system comprise packets having a predetermined source address that are directed to a second predetermined port; the PLD system includes first and second logic portions, wherein a first logic portion operates to communicate packets in accordance with the protocol with the computing system, wherein the second logic portion operates to carry out a process that does not comprise communicating packets in accordance

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with the protocol with the computing system (col. 13 line 14 - col. 14 line 24; col. 34

lines 11-36).

14. In the remarks, applicant argued in substance that

(A) Prior art does not teach a remotely updatable programmable logic device

(PLD) based system.

As to point (A), applicant disclosed in the specification that PLD-based devices

include: common telecommunications devices, such as pagers, cell phones, PDA's,

and WAP phones; common office equipment, such as faxes, photocopiers, printers,

desktop and laptop computers; common home appliances, such as freezers,

refrigerators, washers, dryers, microwaves, and toaster ovens; and common

entertainment equipment, such as radios, televisions, stereo systems, VCRs, handheld

video games (e.g., Nintendo Gameboy TM.), and home video game systems (e.g., Sony

Play Station.TM.), etc. In addition, Hagiuda teaches remotely installing or updating a

printer driver on a network printer (PLD-based device) using NetSpot install's controller

(administrator) mode function (col. 16 line 23 – col. 18 line 61).

(B) Applicant requested that the restriction requirement to be reconsidered.

As to point (B), applicant's election of claims 34 and 49 of subgroups 1 and 2

respectively in the reply filed on 06/01/04 is acknowledged. Because applicant did not

distinctly and specifically point out the supposed errors in the restriction requirement,

the election has been treated as an election without traverse (MPEP § 818.03(a)).

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- 15. Applicant's arguments filed on 07/15/2005 have been fully considered but they are not deemed to be persuasive.
- 16. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Le H. Luu whose telephone number is 571-272-3884. The examiner can normally be reached on 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LE HIEN LUU PRIMARY EXAMINER